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AUTHOR Thayer-Bacon, Barbara
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ABSTRACT

The levels of critical thinking proposed by R. Paul are described and his theory is compared with that of the procedural knowing approach of M. F. Belenky, B. M. Clinchy, N. R. Goldberger, and J. M. Tarule (1986). The distinction between strong sense and weak sense critical thinking is unique to Paul and central to his theory. Critical thinking in the strong sense expects a person to have insight into his or her own cognitive and affective processes, to be able to reason across categories, and to see other viewpoints. Strong sense and weak sense critical thinking require better definition to elucidate the theory, but one can find the possibility of a feminine perspective in Paul's theory. In the thinking of Belenky and others, procedural knowledge is a category of epistemology that relates to Paul's theory. Both forms of critical thinking are forms of procedural knowledge. Paul has essentially pointed out the two ways of procedural knowing that Belenky and others recognize, and has supported connected knowing rather than separated knowing, although he has not discussed the constructed knowledge they define. Critical thinking involves becoming aware of one's deepest held assumptions, and learning to use one's critical skills on these assumptions. (SLD)

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RICHARD PAUL'S STRONG SENSE CRITICAL THINKING AND PROCEDURAL KNOWING: A COMPARISON

by

Barbara Thayer-Bacon
Bowling Green State University

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Richard Paul's Strong Sense Critical Thinking and Procedural Knowing: A Comparison

I. INTRODUCTION

In the field of critical thinking, we find many examples of definitions of just what critical thinking is. Ennis stresses skills, Siegel focuses on rationality, McPeck points to critical thinking being domain specific rather than generally applicable, Paul calls attention to the possibility of degrees/levels of critical thinking, one which is weak and one which is strong. [1] Of all these current theories being presented in critical thinking, Richard Paul's comes closest to bringing out the qualities I am focusing on, as I strive to bring a feminine perspective to critical thinking. What I am working on is a theory of how we know that incorporates thoughts and feelings, and focuses on what the self contributes to knowledge and what the community contributes. For this paper I am hoping to elaborate on the possibility of levels to critical thinking, and thinking that goes beyond critical thinking.

I will begin with a presentation of Paul's levels of critical thinking to point out the seeds of potential, and some problems it presents. Then I will move to a presentation of feminine theory on thinking, show the similarities with Paul's approach, and the extensions that can be made on critical thinking theory, based on feminine thought. Recommendations for further discussion will be the close of this paper.

II. PAUL'S STRONG AND WEAK SENSE CRITICAL THINKING

Paul defines critical thinking, in his "Glossary: An Educator's Guide to Critical Thinking Terms and Concepts," [2] as:

> Critical thinking is disciplined, self-directed thinking which exemplifies the perfections of thinking appropriate to a particular mode or domain of thinking. It comes in two forms. If the thinking is disciplined to serve the interests of a particular individual or group, to the exclusion of their relevant persons and groups, we call it sophistic or weak sense critical thinking. If the thinking is disciplined to take into account the interests of diverse persons or groups, we call it fairminded or strong sense critical thinking.

As the distinction between strong sense and weak sense critical thinking is unique to Paul, and is central to his theory of critical thinking, we should take a closer look at how he defines these two concepts.

In Paul's "Glossary" [2] he defines weak sense critical thinkers as:

> 1) Those who do not hold themselves or those with whom they ego-identify to the same intellectual standards to which they hold "opponents." 2) Those who have not learned how to reason empathically within points of view or frames of reference with which they disagree. 3) Those who tend to think monologically. 4) Those who do not genuinely accept, though they may verbally espouse, the values of critical thinking. 5)

> Those who use the intellectual skills of critical thinking selectively and self-deceptively to foster and serve their vested interests (at the expense of truth); able to identify flaws in the reasoning of others and refute them; able to shore up their own beliefs with reasons.

In contrast, a critical thinker in the "strong" sense is:

> One who is predominantly characterized by the following traits: 1) an ability to question deeply one's own framework of thought; 2) an ability to reconstruct sympathetically and imaginatively the strongest versions of points of view and frameworks of thought opposed to one's own; and 3) an ability to reason dialectically (multilogically) in such a way as to determine when one's own point of view is at its weakest and when an opposing point of view is at its strongest. Strong sense critical thinkers are not routinely blinded by their own points of view. They know that they have points of view and therefore recognize on the basis of what framework of assumptions and ideas their own thinking is based. They realize the necessity of putting their own assumptions and ideas to the test of the strongest objections that can be leveled against them.

With Paul's distinction between weak and strong sense critical thinking, he makes us very aware that there can be degrees, or levels to critical thinking. One is not either a critical thinker or not, as other

theorists have tended to emphasize. One can use her critical thinking skills just to find fault with others arguments, and support for one's own, or one can use those same skills to attempt to understand others' points of view more clearly, and to reflect on one's own point of view more critically. Second, Paul has made the way clear for how we can go about becoming more adept at our critical thinking skills, through dialogue with others, and through the development of character traits, such as intellectual humility, courage, integrity, empathy perserverance, faith in reason and a sense of justice.

Yet, Paul creates confusion with what he means by strong sense critical thinking. At times critical thinking in the strong sense expects a person to be able to have insight into her own cognitive and affective processes, be able to reason across categories or disciplinary lines, and look at other points of view from their perspectives, reciprocally (all of this Paul labels dialectical thinking, calling for dialogical reasoning). At these times Paul stresses a contentious approach to critical thinking. He defines the dialectic method so:

> "When thinking dialectically, reasoners pit two or more opposing points of view in competition with each other, developing each by providing support, raising objections, countering those objections, raising further objections, and so on." ("Glossary: An Educator's Guide to Critical Thinking Terms and Concepts," p. 5)

Thus, students are pitting their views in competition. At other times, as in his response to Goldman's article, he seems to be saying that he wants to,

> "encourage and nurture the child's natural and spontaneous tendency to wonder and question. ...we are in much too big a hurry to get to the correct answers. (We need to place) the emphasis ...on creating an environment in which children can express themselves on ideas of significance without taking personal risks, to get to the heart of matters through mutually supportive questioning and dialogue." ("The Socratic Spirit," p 63)

This kind of critical thinking doesn't sound nearly as strong.

My suggestion is that Paul has two elements to his strong sense critical thinking, that he doesn't equivocate on this concept, but because he has not distinguished these elements, he adds confusion to his theory. At times what he suggests is much stronger than at other times. I also want to suggest that his stronger version of strong sense critical thinking is too strong. If strong sense critical thinking is just critical thinking applied to one's own thinking process, then this is certainly within our grasps. It is the kind of thinking philosophers do, and have been doing since the birth of philosophy. But Paul uses terms such as "an ability to question deeply one's own framework of thought... an ability to reconstruct sympathetically and imaginatively the strongest versions of points of view and frameworks of thought opposed to one's own..." ("Glossary," p. 21, my emphasis). These terms of "depth" and "strength"

are relative terms and misleading. If someone is critical of Paul's strong sense critical thinking being too strong, as Goldman is, Paul can take a lesser, softer approach and deny that he means it to be so strong. At other times, if necessary, Paul can take a stronger, tougher approach to what strong sense critical thinking is, as he does in his criticism of Lipman's definition of critical thnking. At these times, if we truly follow Paul's advise, it is hard to see how we are ever able to make a decision at all, without hedging. In Paul's criticism of Lipman's definition of critical thinking as skillful, responsible thinking that facilitates good judgment because it (1) relies upon criteria, (2) is self-correcting, and (3) is sensitive to context, he says,

> "it would not be difficult to find instances of thinking that were self-correcting, used criteria, and responded to context in one sense but nevertheless were uncritical in some other sense. For example, one's particular criteria might be uncritically chosen or the manner of responding to context deficient in a variety of ways." ("Regarding a Definition of Critical Thinking," p. 1)

As Paul states here, it leads us to the conclusion that one cannot make a decision without hedging, for one can never be sure if one has been critical enough. Have I delved <u>deep enough</u> into my own cognitive and affective processes? Have I attempted to reconstruct sympathetically and imaginatively <u>strong enough</u> versions of points of view and frameworks of thought opposed to my own? Have I looked at my criteria <u>critically enough</u>? How can I ever be sure of being a <u>strong enough</u> strong

sense critical thinker? If hedging is always a necessity, the thinking is not critical; it seems more like begging the question. Yet, if one looks at Lipman's definition in not so harsh terms, one can see that he is defining critical thinking as Paul has presented it. Using Paul's terms, critical thinking relies on universal logic to avoid relativism (criteria), is applied to oneself (is self-correcting), and tries to look at other world views sympathetically, before deciding which is right (is sensitive to context). A possible answer Paul could make to this criticism is that his stronger elements of critical thinking in the strong sense are an ideal for us to strive toward and for us to use as a measuring stick. As an ideal, even though critical thinking in the strong sense is impossible to actually obtain, it does have value. Paul does not use this line of argument himself, he never says strong sense critical thinking is unobtainable, just difficult to obtain.

I would like to suggest that Paul's contentious; competitive elements in critical thinking (even the terms "strong" and "weak" suggest this) need emending. They need emending in the form of identifying them in his theory. His weaker elements of strong sense critical thinking also need to be identified, and as they are more obtainable, I would recommend they be focused upon and stressed more. Paul says, in "Dialogical Thinking," that fostering dialogical or dialectical thinking only leads to strident arguments, close-minded debates, and controversy

> "in the context of unreconstituted egocentric attachment. People typically argue for egocentric purposes and with egocentric ends in view. They argue to score points, defeat the other person, make their point of view look good. They

> experience it as a battle, not as a mutual or cooperative search for a fuller grasp of what is so. Yet I know from some years of working with students that they can learn to reason dialogically in mutually supportive ways, that they can learn to experience the dialogical process as leading to discovery, not victory." ("Dialogical Thinking," p. 139-140)

We can see from this quote that Paul blames the contentious, competitive elements in critical thinking on people's tendency to be egocentric, not on the possibility that strong sense critical thinking could be too strong. As I have already argued, our tendency is to be social and rational, not selfish, self-centered, and irrational, I would argue that we develop a contentious, competitive approach because it is taught to us. We can just as easily learn to be cooperative and supportive in our search for truth.[4]

Paul's (weaker) strong sense critical thinking, in emphasizing the need to understand other people's perspectives and world views, leans in the direction of relationships and caring. It leans toward stressing interconnections and relatedness, and contextual relativism. One can find the possibility of a feminine perspective in Paul's critical thinking theory.

III. PROCEDURAL KNOWING

In *Women's Ways of Knowing, the Development of Self, Voice, and Mind*, by Belenky, Clinchy, Goldberger, and Tarule,[5] a theory of epistemology is presented, based on five years of research interviewing women from all classes, races, family backgrounds, and levels of education. The theory strives to present women's ways of knowing, consciously avoiding the exclusion of ways of intellectual development

that don't fit the male experience. The researchers of *Women's Ways of Knowing* (hereafter referred to as *WWK*) present five epistemological categories that emerged from their study. The categories are not claimed to be fixed, exhaustive, or universal. They are not limited to just women, and they don't claim to capture the complexity of someone's thought and life. The book presents these categories through the women who were interviewed, in their words, with their voices. [6]

The five epistemolical categories that Belenky, Clinchy, Goldberger, and Tarule present are: 1) silence (women experience themselves as mindless and voiceless and subject to the whims of external authority), 2) received knowledge (women conceive of themselves as capable of receiving, even reproducing knowledge from the all-knowing external authorities. They think they are not capable of creating knowledge on their own.) 3) subjective knowledge (truth and knowledge are conceived of as personal, private, and subjectively known or intuited), 4) procedural knowledge (women are invested in learning and applying objective procedures for obtaining and communicating knowledge), and 5) constructed knowledge (women view all knowledge as contextual, experience themselves as creators of knowledge, and value both subjective and objective strategies for knowing). [7]

Of these five categories, the two I wish to examine more carefully, so that we can then compare these to Paul's categories of critical thinking, are procedural knowledge and constructed knowledge. Procedural knowledge, or reasoned reflection, is the voice of reason. It is a humbler, softer, more powerful voice. Procedural knowers seek to understand other people's ideas in the other people's terms rather than in their own terms. The procedural knower believes intuitions may deceive,

they can be irresponsible or fallible. She also believes some truths are truer than others, truth can be shared, and that you can know things you've never seen or touched. Procedural knowers learn to engage in conscious, deliberate, systematic analysis. They also learn that truth is not immediately accessible. They speak cautiously, acquire and apply proocedures for obtaining and communicating knowledge, look at different perspectives, world views, and learn to become more objective. Procedural knowledge focuses on the the development of skills and techniques for finding truth, it emphasizes method and form, not content. Procedural knowers are practical, pragmatic problem solvers. [8]

Within procedural knowledge, there is a distinction that can be made between separate knowing and connected knowing. These two ways of knowing are not gender specific. Carol Gilligan's work was the guide for these two ways of knowing.[9] In separate knowing "the separate self experiences relationships in terms of "reciprocity," considering others as it wishes to be considered." With connected knowing, "the connected self experiences relationships as "response to others in their terms."" The heart of separate knowing is critical thinking. The goal is to doubt, to assume that everyone, including I, may be wrong. It takes on an adversarial form, a debate, in which the goal is self-extrication, to avoid projection by suppressing the self and taking an impersonal stance. The voice is specialized and speaks a public language. [10] This form of procedural knowledge can be identified as an element in Paul's critical thinking in the strong sense. This form of knowing is like the stronger version of strong sense critical thinking, which tends to bring out a more contentious, either/or approach.

Connected knowing, as the other form of procedural knowledge, "builds on the subjectivists' conviction that the most trustworthy knowledge comes from personal experience rather than the pronouncements of authorities." [11] It allows the self to participate, and develops procedures for gaining access to other people's knowledge, through sympathy. Instead of stressing doubting, it stresses believing. The connected knower refuses to judge, but rather tries to understand the other person's situation, and ways of thinking, by using personal knowledge. Personality adds to the perception, and therefore, to be an adept connected knower, one must know one's own point of view. Self-analysis is required for complex connected knowing. Like Nel Nodding's "care," it entails "generous thinking" and "receptive rationality." [12] "Authority in connected knowing rests not on power or status or certification but on commonality of experience. " [13] This form of procedural knowledge can also be identified as an element in Paul's critical thinking in the strong sense. This form of knowing, like the weaker version of strong sense critical thinking, tends to bring out a more supportive, sympathetic approach.

Belenky et al point out that using either of these forms of knowing is still procedural knowledge. The goal is to seek to understand other people's ideas in the other people's terms, rather than in one's own terms. Procedural knowers feel like chameleons, able to remove their own voice to understand others' points of views, but in the process, their own sense of identity becomes/is weak. Constructed knowledge is an attempt to integrate the voices, to reclaim the self, and attempt to integrate personal knowledge and expert knowledge.

IV. CONSTRUCTIVE KNOWING

The basic insight that constructed knowers come to is "*All knowlege is constructed*, and *the knower is an intimate part of the known.*" [14] Theories are models for approximating experience. To be a constructed knower, one needs a high tolerance for internal contradiction and ambiquity, one needs to learn to live with conflict. The constructed knower has to abandon the either/or thinking of procedural knowledge, and search for a unique and authentic voice. The constructed knower moves beyond systems, but puts systems to her own service. "When truth is seen as a process of construction in which the knower participates, a passion for learning is unleashed." [15]

Characteristics of the women at the position of constructed knowledge that were identified by Belenky et al in their research on women's ways of knowing, were:

- the opening of the mind *and* the heart to embrace the *world*

- becoming and staying aware of the workings of their minds was vital to their sense of well-being

- the potential to be empathic, attentive, caring of people, written word, even impersonal objects

- the establishing of a communion with what they are trying to understand, and the using of a language of intimacy to describe the relationship between the knower and the known

- the use of "real talk" (instead of didactic talk), conversation where domination is absent, reciprocity and cooperation are prominent, where the goal is to share one's ideas and the process of one's thinking. Doubting is still used to test ideas, but believing is used more, to "get a feel for"

ideas. Believing suspends doubt in order to understand and arrive at meaning.

- question posing is central to the constructivist's way of knowing
- the moral response is a caring response [16]

My goal, in explaining the distinction made between procedural knowledge, whether it is separate or connected, and constructed knowledge, is to point out something important that is missing from Paul's (and other's) critical thinking theory. Both weak and strong sense critical thinking are forms of procedural knowledge. Paul's distinction focuses on whether the procedural skills of critical thinking are used to support one's own position, and these skills remain extrinsic to the character of the person, or if these skills become intrinsic to the character of the person, and are used to add insight into one's own affective and cognitive processes. His stress is on removing the self from the critical thinking process, in order to try to fairly understand other's points of views, and to apply the same critical thinking skills on ourselves that we use to judge other positions. It is easy to anticipate that in trying to remove oneself, and understand others' points of views, one will end up feeling "like a chameleon," able to remove her own voice to understand others' points of views, but in the process, her own sense of identity will become weak. Paul also stresses that critical thinking skills become intrinsic to the character of the person. This is what is required to be an adept connected knower (or, for Paul, a strong sense critical thinker). Self-analysis is required for complex connected knowing, one must know one's own point of view. Basically, what Paul has done with his critical thinking theory, is point out the two types of

procedural knowing *Women's Ways of Knowing* points out, and come down in favor of connected knowing, rather than separated knowing. He has not moved on to the fifth way of knowing, constructed knowledge, though seeds for its growth are there in his theory.

V. CONCLUSION

I chose Richard Paul's critical thinking theory to compare and contrast with Belenky et al's theory of ways women know because his theory has elements of a feminine perspective to critical thinking. Paul has recognized the difference between procedural knowing and connected knowing, what he has labelled weak and strong sense critical thinking, and pointed out that critical thinking is more than just appying a set of criteria to reasons supplied in arguments. Critical thinking involves becoming aware of one's deepest held assumptions, one's we adopt through mileau education (enculturation), and learning to use one's critical thinking skills on these very assumptions. The way one can try to learn about one's deepest held convictions, is by being willing to "suspend disbelief" and "try on" another's point of view. This believing process in critical thinking is as important as the doubting process.

I chose Belenky et al's work to compare and contrast with Paul's theory because *Women's Ways fo Knowing* points out something very important that is missing from traditional critical thinking theories, even ones with a feminine tendency such as Paul's. Traditional critical thinking theories stress being objective, and losing one's subjectivity as much as possible, distancing the self, or removing the self (which, by the way, is an impossibility! See Thayer-Bacon, 1991). Belenky et al describe

in their study women who have discovered that to feel connected to their learning and better able to understand their work, they must stay in touch with their own voice, they must NOT lose their self. Women who are constructive knowers have learned to value their own voice (the intuitive, subjective kind of knowing) and incorporate their voice into their studies, along with critical thinking skills. This is a very important idea, I believe. What is the result of learning something very important is missing from critical thinking theory, that something being the voice we bring to the critique? A dramatic change in how we know and critique our knowledge, is the result. A paradigm shift from Aristotle's form/matter epistemology to a relational epistemology that acknowledges and understands the importance of including our voices, of including the personal voice with the expert voice, of including feelings and thought, of including the individual's voice and the community's voice, is the result. This is the direction my work is moving, along with many others in the field of philosophy, and related fields of study. The method is more of a conversation, than a debate, a sharing of voices, a collaboration, that helps us reach agreed upon knowledge. I thank you for sharing your voices and adding to the conversation.

ENDNOTES

1. Robert Ennis, "A Taxonomy of Critical Thinking Dispositions and Abilities," in Teaching Thinking Skills: Theory and Practice , ed. Joan Boykoff Baron and Robert Sternberg (New York: W. H. Freeman, 1987)

Harvey Siegel, Educating Reason (New York: Routledge, 1988)

John McPeck, Critical Thinking and Education (New York: St. Martin's Press, 1981)

Richard Paul, Critical Thinking: What Every Person Needs in a Rapidly Changing World (Sonoma, CA: Sonoma State University, 1990)

2. Paul, Ibid., Chapter 41.

3. Richard Paul, "The Socratic Spirit: An Answer to Louis Goldman," in Educational Leadership (Sept. 1984) : 63-64.

4. Barbara Thayer-Bacon, "Egocentrism in Critical Thinking Theory," *Inquiry*, May, 1991, and "Critical Thinking and Democracy," *Ohio Valley Philosophy of Education*,1990.

5. Mary Field Belenky, Blythe McVicker Clinchy, Nancy Rule Goldberger and Jill Mattuck Tarule, Women's Ways of Knowing (New York: Basic Books, Inc., 1986).

6. "Voice" is not used just as a metaphor for "point of view" (or "world view", the term Paul often uses); it is a metaphor used by women to depict their intellectual and ethical development; developing a sense of voice is intricately intertwined with mind and self. "Voice" seems to be an appropriate metaphor, an ear/sound metaphor, instead of eye/sight metaphors that have often been used, for voice stresses the feminine predisposition toward connection and conversation. Hearing something and being heard requires physical closeness. Seeing works better as a metaphor for males' ways of knowing, for it requires standing back, disengagement.

7. Ibid., p.15.

8. Ibid., p. 97.

9. Carol Gilligan, In a Different Voice (Cambridge: Harvard University Press. 1982).

10. Ibid., p. 102, 104, 108, 109, 111.

11. Ibid., p. 112, 113.

12. Nel Noddings, Caring: A Feminine Approach to Ethics and Moral Education (Berkeley, CA: University of California Press, 1984).

13. Women's Ways of Knowing , p. 118.

14. Ibid., p. 137.

15. Ibid., p. 140.

16. Ibid., pp. 141,143,146. See also, "Toward a Feminist Poetic of Critical Thinking," *Philosophy of Education* , 1989.